

# Monthly Wholesale Trade

Sales and Inventories
December 1999

BW/99-12 Issued February 2000

#### U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU

## MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES DECEMBER 1999

**Notice of Final Report** – In an effort to save cost, this is our final report. Information from this report will remain available through the Internet on the site shown at the bottom of this page. For any questions or for a copy of this report contact Scott Scheleur at 301-457-2747.

Intention to Revise Wholesale Estimates: Monthly wholesale data will be revised based on the results of the 1998 Annual Trade Survey. Unadjusted sales, inventories, and inventories/sales ratios will be revised for January 1993 through February 2000, while corresponding adjusted data will be revised for January 1990 through February 2000. Revised data are scheduled for release the week of May 1.

**Sales.** December 1999 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$240.1 billion, up 1.1 percent (+/-0.7%) from the revised November level and were 11.7 percent (+/-1.2%) above the December 1998 level. The November preliminary estimate was revised upward \$0.7 billion or 0.3 percent. December sales of durable goods increased 1.6 percent (+/-1.0%) from last month and were up 12.4 percent (+/-1.6%) from a year ago. Compared to last month, sales of metals and minerals, except petroleum were up 2.2 percent. Among nondurable goods, sales of drugs, drug proprietaries, and druggists' sundries increased 3.4 percent from last month, while farm-product raw materials fell 6.1 percent.

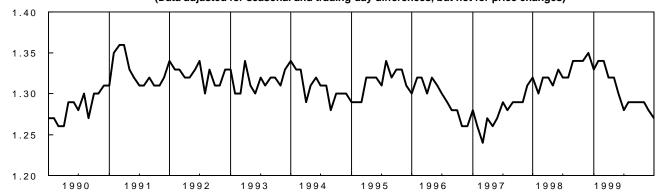
**Inventories.** Total inventories of merchant wholesalers, after adjustment for seasonal variations but not for price changes, were \$305.0 billion at the end of December, up 0.4 percent (+/-0.5%) from the revised November level and were 6.4

percent (+/-1.7%) above December 1998. The November preliminary estimate was revised upward \$0.7 billion or 0.2 percent. Among durable goods, inventories of furniture and home furnishings increased 2.4 percent from last month and electrical goods increased 2.3 percent. Within the nondurable goods trade, inventories of chemicals and allied products increased 2.2 percent from last month, while petroleum and petroleum products decreased 3.0 percent.

**Inventories/Sales Ratio.** The December inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.27. The December 1998 ratio was 1.33.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling variability. A discussion of the reliability of the data and general survey methodology appears in BW/97-RV Current Business Reports.

### Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1990 to 1999 (Data adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for January is scheduled to be released March 9, 2000 at 10:00 a.m.

Address inquiries concerning this report to Service Sector Statistics Division, Bureau of the Census, Washington, DC 20233, or call Scott Scheleur, (301) 457-2747 or 457-2764. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

This report is available on day of issue through the Department of Commerce's online Economic Bulletin Board (202-482-1986). The data are also available on the internet - http://www.census.gov/svsd/www/mwts.html.

Table 1. Estimated Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers: 1999 and 1998

[In millions of dollars]

[In millio	ons of dollars]	1					-						1			
		Sales					Inventories						Inventories/Sales			
		Monthly			Percent change			Monthly			Percent change			Ratios		
SIC1	Kind of	Dec.	Nov.	Dec.	Dec./	Nov./	Dec. 99	Dec.	Nov.	Dec.	Dec./	Nov./	Dec. 99	Dec.	Nov.	Dec.
code	Business	1999 (p)	1999 (r)	1998 (r)	Nov.	Oct.	Dec. 98	1999 (p)	1999 (r)	1998 (r)	Nov.	Oct.	Dec. 98	1999 (p)	1999 (r)	1998 (r)
	2	(P)	(1)	(1)				(b)	(1)	(1)				(p)	(1)	(1)
<u>Adjus</u>		240,142	237,464	215,061	1.1	1.9	11.7	305,005	303,649	286,705	0.4	1.3	6.4	1.27	1.28	1.33
	U.S. Total	·	,	,				,	,	,			-		1.20	1.64
50	Durable	128,462	126,486	114,332	1.6	1.9	12.4	199,119	198,354	187,574	0.4	1.6	6.2	1.55		
501	Automotive	19,897 4,202	19,743 4,170	17,567 3,898	0.8 0.8	-1.1 -1.2	13.3 7.8	29,716 6,365	29,430 6,215	26,840 5,975	1.0 2.4	2.5 -2.8	10.7 6.5	1.49 1.51	1.49 1.49	1.53 1.53
502 503	Furniture	9,050	4,170 8,987	3,096 8,018	0.8	2.9	7.8 12.9	9,135	9,032	8,108	1.1	-2.0 -1.3	12.7	1.01	1.01	1.01
504	Lumber Prof. equip.	23,788	23,512	21,609	1.2	1.4	10.1	26,640	26.547	25,899	0.4	1.6	2.9	1.12	1.13	1.20
505	Metals	8,272	8,096	7,657	2.2	4.0	8.0	13,158	13,107	13,684	0.4	1.6	_	1.59	1.62	1.79
506	Electrical	21,717	21,184	17,784	2.5	4.9	22.1	30,352	29,678	26,382	2.3	2.6	15.0	1.40	1.40	1.48
507	Hardware	6,739	6,714	6,590	0.4	1.6	2.3	13,321	13,349	13,378	-0.2	1.2	-0.4	1.98	1.99	2.03
508	Machinery	20,904	20,580	20,090	1.6	0.5	4.1	51,144	51,699	49,964	-1.1	0.5	2.4	2.45	2.51	2.49
509	Other Durable	13,893	13,500	11,119	2.9	4.4	24.9	19,288	19,297	17,344	0.0	4.7	11.2	1.39	1.43	1.56
51	Nondurable	111,680	110,978	100,729	0.6	1.8	10.9	105,886	105,295	99,131	0.6	0.7	6.8	0.95	0.95	0.98
511	Paper	8,567	8,645	7,894	-0.9	1.5	8.5	9,981	10,127	9,494	-1.4	1.6	5.1	1.17	1.17	1.20
512	Drugs	13,349	12,913	11,250	3.4	4.8	18.7	18,179	18,017	15,116	0.9	-0.1	20.3	1.36	1.40	1.34
513	Apparel	8,207	8,193	7,061	0.2	4.3	16.2	11,339	11,304	12,608	0.3	-0.3	-10.1	1.38	1.38	1.79
514	Groceries	31,707	31,615	29,267	0.3	1.1	8.3	19,374	19,210	16,973	0.9	2.7	14.1	0.61	0.61	0.58
515	Farm-products	7,792	8,297	9,009	-6.1	-1.4	-13.5	10,908	11,002	10,877	-0.9	-4.0	0.3	1.40	1.33	1.21
516	Chemicals	4,612	4,498	4,467	2.5	1.4	3.2	4,779	4,675	4,921	2.2	-0.6	-2.9	1.04	1.04	1.10
517	Petroleum	13,489	13,078	9,544	3.1	-0.2	413	3,874	3,992	3,934	-3.0	1.4	-1.5	0.29	0.31 1.08	0.41
518	Alcohol	5,747 18,210	5,813 17,926	5,324 16,913	-1.1	-0.1	7.9 7.7	6,368 21,084	6,295	5,885 19,323	1.2 2.0	-0.5	8.2	1.11	1.15	1.11
519	Other Nondur.	18,210	17,926	16,913	1.6	4.0	1.1	21,084	20,673	19,323	2.0	3.1	9.1	1.16		1.14
Not A	<u>Adjusted</u>														s to d	
														1999 1998		
	U.S. Total	243,346	236,771	219,176	2.8	-0.4	11.0	306,258	306,192	287,997	0.0	1.3	6.3	2,721,7		535,008
50	Durable	129,017	125,624	115,336	2.7	-2.0	11.9	196,027	196,466	184,769	-0.2	1.0	6.1	1,458,6		359,989
501	Automotive	20,076	19,585	18,006	2.5	-2.5	11.5	28,884	29,489	26,062	-2.1	2.7	10.8	227, 49,		202,924 47,836
502	Furniture	4,244 8,000	4,429 8,744	3,956 7,112	-4.2 -8.5	-0.7 -4.8	7.3 12.5	6,250 8,715	6,153 8,707	5,861 7,759	1.6 0.1	-5.0 -1.4	6.6 12.3	103,		91,626
503 504	Lumber Prof. og vin	25,953	22,548	23,359	-6.5 15.1	-3.8	11.1	26,427	26,839	25,744	-1.5	1.9	2.7	271,		255,865
505	Prof. equip. Metals	7,834	7,845	7,297	-0.1	-1.1	7.4	13,342	12,845	13,876	3.9	1.6	-3.8	93,		96,161
506	Electrical	21,456	21,248	17,606	1.0	-1.5	21.9	29,684	29,233	25,802	1.5	2.7	15.0	235,		211,844
507	Hardware	6,267	6,748	6,162	-7.1	-3.6	1.7	13,081	13,095	13,137	-0.1	1.1	-0.4	81,	166	77,421
508	Machinery	21,113	20,045	20,452	5.3	-1.0	3.2	50,684	50,924	49,514	-0.5	-0.2	2.4	244,	714	241,392
509	Other Durable	14,074	14,432	11,386	-2.5	1.1	23.6	18,960	19,181	17,014	-1.2	0.3	11.4	151,	720	134,920
51	Nondurable	114,329	111,147	103,840	2.9	1.5	10.1	110,231	109,726	103,228	0.5	1.8	6.8	1,263,1	89 1	175,019
511	Paper	8,618	8,541	7,981	0.9	-2.3	8.0	10,201	10,390	9,712	-1.8	4.2	5.0	98,	723	90,366
512	Drugs	14,137	13,016	12,037	8.6	6.0	17.4	18,452	17,999	15,343	2.5	-2.0	20.3	146,	214	124,355
513	Apparel	6,574	7,734	5,811	-15.0	-8.8	13.1	11,520	11,033	12,797	4.4	-1.9	-10.0	92,	450	85,615
514	Groceries	32,341	31,805	30,116	1.7	1.9	7.4	19,413	19,959	17,024	-2.7	1.9	14.0	363,	252	346,586
515	Farm-products	8,976	9,293	10,531	-3.4	3.3	-14.8	13,668	14,060	13,607	-2.8	2.6	0.4	100,	282	108,128
516	Chemicals	4,354	4,386	4,244	-0.7	-1.4	2.6	4,832	4,675	4,970	3.4	1.3	-2.8	52,		54,828
517	Petroleum	14,433	13,431	10,031	7.5	1.3	43.9	3,932	4,128	4,001	-4.7	0.8	-1.7	145,		120,548
518	Alcohol	6,759	6,162	6,277	9.7	5.7	7.7	5,948	6,685	5,485	-11.0	-2.4	8.4	67,		61,838
519	Other Nondur.	18,137	16,779	16,812	8.1	3.3	7.9	22,265	20,797	20,289	7.1	7.6	9.7	197,	190	182,755

p Preliminary estimate. r Revised.

<sup>1</sup> For a full description of the SIC codes shown above, see the "1987 Standard Industrial Classification Manual" or the Current Business Reports "Annual Benchmark Report for Wholesale Trade" publication.

<sup>2</sup> Data adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for seasonal adjustment factors used.

Table 2. Coefficients of Variation and Standard Error for Sales and Inventories

SIC code		Coeffic	eients of v	ariation fo	or level	Sta	andard er	ror for tre	nd	variation	ients of for level 100)	Standard error for trend
	Kind of Business	Preliminary estimates		Final estimates		Ratio of two consecutive months		Year-to-year estimates		Cumulative sales estimates		Current year cumulative
		Sales	Inv.	Sales	Inv.	Sales	Inv.	Sales	Inv.	Current	Previous	to
		Median	Median	Median	Median	Median	Median	Median	Median	year	year	previous year cumulative
	U.S. Total	1.4	1.5	1.3	1.5	0.4	0.2	0.7	0.6	1.3	1.1	0.6
50	Durable	1.9	2.5	1.9	2.5	0.6	0.3	1.0	0.8	1.8	2.0	0.8
501	Automotive	4.6	4.8	4.8	4.8	1.2	0.7	2.3	3.1	4.6	4.9	1.7
502	Furniture	6.3	8.3	6.3	8.1	1.9	1.0	2.7	2.3	5.8	6.2	1.7
503	Lumber	5.7	5.4	5.7	5.4	1.3	0.9	2.1	3.8	5.6	5.6	1.4
504	Prof. equip.	6.8	6.6	6.7	6.6	1.3	0.5	3.4	2.0	6.6	5.6	3.1
505	Metals	5.2	10.8	5.1	10.9	1.1	0.7	1.6	2.1	5.0	5.1	0.9
506	Electrical	5.5	7.3	5.6	7.3	1.2	0.6	2.7	2.4	5.4	6.2	1.8
507	Hardware	5.8	6.6	5.6	6.6	1.2	0.6	1.8	1.9	5.7	5.6	0.9
508	Machinery	5.9	6.7	6.0	6.7	2.1	0.5	2.7	1.4	5.7	6.5	1.6
509	Other Durable	6.6	9.8	6.5	9.7	1.6	0.8	2.4	3.1	6.4	6.0	1.6
51	Nondurable	2.3	2.6	2.2	2.6	0.5	0.4	0.9	1.3	2.1	1.8	0.6
511	Paper	6.6	5.2	6.0	5.2	0.8	0.5	1.8	1.4	6.0	5.2	1.0
512	Drugs	6.0	4.8	6.0	4.7	0.8	0.5	2.4	1.5	5.9	6.6	1.7
513	Apparel	5.6	7.0	5.5	7.0	1.8	1.0	3.2	2.5	5.0	4.8	1.7
514	Groceries	3.1	5.1	3.1	5.0	0.7	0.6	1.2	1.9	3.0	3.3	0.7
515	Farm-products	7.2	8.9	7.1	8.9	2.3	1.5	3.0	4.1	7.0	5.9	2.2
516	Chemicals	5.3	5.9	5.4	6.0	1.2	0.9	1.9	2.9	5.2	5.5	1.0
517	Petroleum	7.0	13.6	7.0	13.6	1.0	1.0	1.7	1.8	6.3	6.7	1.5
518	Alcohol	5.8	8.4	6.0	8.3	1.5	1.2	1.9	1.9	5.9	6.3	1.3
<u>519</u>	Other Nondur.	7.8	10.7	7.0	10.0	2.0	1.2	3.5	4.4	7.5	5.6	2.7

Note: The median measures of variability are based on the most recent 12 months of data.

#### Sample Design and Reliability of Data

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling.

Sampling errors occur because observations are made on a sample, not on the entire population, and different samples could have led to different estimates. Standard errors and coefficients of variation, as calculated for this report, are measures of sampling variation. The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90% confidence interval. If, for example, the trend estimate is up 1.2% and the standard error is 0.9%, then the margin of sampling error is  $\pm 1.65$  x 0.9% or  $\pm 1.5\%$ , and the 90% confidence interval is -0.3% to +2.7%. If the interval contains 0, it cannot be stated with certainty whether there was an increase or decrease. For monthly level, the coefficient of variation (CV) is given. The resulting confidence interval is the estimated value  $\pm 1.65$  x CV x (the estimated value).

Nonsampling errors are usually attributed to many possible sources: (1) coverage error - failure to accurately represent all population units in the sample,

(2) inability to obtain information about all sample cases, (3) response errors, possibly due to definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of collection or processing, or in imputing for missing or inconsistent data. Coverage error has an effect on the accuracy of estimates for this survey to the extent that the administrative records system, which forms the basis of our survey universe frame, does not contain all legal businesses. A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For all kinds of businesses combined, imputed data amount to about 31 percent of the total monthly wholesale sales estimates and 32 percent of the total monthly wholesale inventories estimates.

Nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

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Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC	Kind of	Sales							Inventories						
code	Business	2000 1999						2000 1999					1998		
		Jan.	Dec.r	Nov.r	Oct.	Sep.	Dec.r	Jan.	Dec.r	Nov.r	Oct.	Sep.	Dec.r		
	U.S. Total <sup>1</sup>	0.910	1.011	0.999	1.020	1.027	1.016	1.018	1.005	1.010	1.007	0.982	1.004		
50	Durable	0.884	0.998	0.993	1.033	1.044	1.003	0.997	0.984	0.991	0.996	0.996	0.984		
501	Automotive	0.869	1.009	0.992	1.006	0.973	1.025	1.016	0.972	1.002	1.000	0.987	0.971		
502	Furniture	0.875	1.010	1.062	1.057	1.055	1.015	0.982	0.982	0.990	1.014	1.035	0.981		
503	Lumher	0.813	0.884	0.973	1.052	1.064	0.887	0.973	0.954	0.964	0.965	0.999	0.957		
504	Prof equin	0.904	1.091	0.959	1.011	1.082	1.081	1.006	0.992	1.011	1.008	0.987	0.994		
505	Metals	0.948	0.947	0.969	1.019	1.015	0.953	1.010	1.014	0.980	0.980	0.989	1.014		
506	Flectrical	0.883	0.988	1.003	1.068	1.084	0.990	0.996	0.978	0.985	0.984	1.006	0.978		
507	Hardware	0.873	0.930	1.005	1.059	1.045	0.935	0.985	0.982	0.981	0.982	0.993	0.982		
508	Machinery	0.899	1.010	0.974	0.989	0.986	1.018	0.986	0.991	0.985	0.992	0.983	0.991		
509	Other Durable	0.857	1.013	1.069	1.104	1.104	1.024	0.993	0.983	0.994	1.038	1.032	0.981		
51	Nondurable	0.939	1.029	1.006	1.009	1.006	1.033	1.055	1.042	1.046	1.028	0.959	1.041		
511	Paner	0.976	1.006	0.988	1.027	1.052	1.011	1.016	1.022	1.026	1.000	0.983	1.023		
512	Druas	0.999	1.059	1.008	0.997	1.014	1.070	1.070	1.015	0.999	1.018	0.981	1.015		
513	Annarel	0.914	0.801	0.944	1.080	1.135	0.823	1.048	1.016	0.976	0.992	1.003	1.015		
514	Groceries	0.946	1.020	1.006	0.998	0.997	1.029	0.995	1.002	1.039	1.047	1.002	1.003		
515	Farm-products	1.041	1.152	1.120	1.069	0.979	1.169	1.279	1.253	1.278	1.196	0.726	1.251		
516	Chemicals	0.938	0.944	0.975	1.003	0.992	0.950	1.005	1.011	1.000	0.981	0.982	1.010		
517	Petroleum	0.960	1.070	1.027	1.011	0.983	1.051	1.008	1.015	1.034	1.040	1.013	1.017		
518	Alcohol	0.731	1.176	1.060	1.002	1.027	1.179	0.924	0.934	1.062	1.083	1.045	0.932		
519	Other Nondur	0.854	0.996	0.936	0.942	0.976	0.994	1.065	1.056	1.006	0.964	0.937	1.050		





adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the

Note: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.